

IN THE CLAIMS

~~Please delete claims 2, 8, and 14. Please amend claims 1, 7 and 13 as follows:~~

sub B2  
1. (Amended) An extensible file access method for accessing a foreign file system from a  
local data processing system with a native file system, said foreign file system being located on a  
3 remote data processing system, said foreign file system having a set of foreign file attributes  
4 corresponding to each of a plurality of files in the foreign file system, and said native file system  
5 having a set of native file attributes corresponding to each of a plurality of files in the native file  
6 system, said method comprising the steps of:  
7       generating a request from a client on the local data processing system to the remote data  
8 processing system to open a foreign file in the foreign file system;  
9       opening of the of the foreign file by the foreign file system;  
A3 10       sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the  
11 local data processing system;  
12       storing of the foreign file attributes by the local data processing system;  
13       determining a subset of the foreign file attributes which are equivalent to a corresponding  
14 subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter  
15 known as conventional file attributes;  
16       returning the conventional file attributes to the client;

17 storing a remaining subset of the foreign file attributes which are not equivalent to a  
18 corresponding subset of file attributes of the native file system, the remaining subset of the foreign  
19 file attributes hereinafter known as extended file attributes;  
A<sup>3</sup> 20 accessing of the foreign file attributes stored in the local data processing system by the  
21 local data processing system client to process the foreign file; and  
22 processing by the local data processing system client the foreign file using the stored  
23 foreign file attributes.

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1 2. (Deleted)

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1 3. The method of claim 2 further comprising the steps of:  
2 accessing of the foreign file by the client via a protocol of the native file system, the  
A<sup>4</sup> 3 accessing being performed in a similar manner to accessing a native file system file; and  
4 accessing of the foreign file by the client by use of the extended file attributes, the  
5 accessing being performed via a protocol different from the native file system protocol.

1 4. The method of claim 2 wherein the storing step further comprises:  
2 starting an expiration timer corresponding to the extended file attributes; and  
3 removing the extended file attributes from the local data processing system storage after  
4 the expiration of the expiration timer.

1 5. The method of claim 2 wherein the sending of the foreign file attributes is performed by a  
2 web server located on the remote system, the web server being capable of sending and receiving  
3 messages via a network.

1 6. The method of claim 2 further comprising the steps of:  
2 storing the extended file attributes in a shared memory portion of the local data processing  
3 system storage which is accessible by the client and other local data processing system processes;  
4 associating a unique handle with the extended file attributes; and  
5 providing the unique handle to a local data processing system process to enable the local  
6 data processing system process to access the extended file attributes.

1 7. (Amended) An article of manufacture for use in a computer system for accessing a  
2 foreign file system from a local data processing system data processing system with a native file  
3 system, said foreign file system being located on a remote data processing system, said foreign file  
4 system having a set of foreign file attributes corresponding to each of a plurality of files in the  
5 foreign file system, and said native file system having a set of native file attributes corresponding  
6 to each of a plurality of files in the native file system, said article of manufacture comprising a  
7 computer-readable storage medium having a computer program embodied in said medium which  
8 causes the computer system to execute the method steps comprising:

9 generating a request from a client on the local data processing system to the remote data  
10 processing system to open a foreign file in the foreign file system;

11 opening of the of the foreign file by the foreign file system;

12 sending of the file attributes of the foreign file, hereinafter foreign file attributes, to the  
13 local data processing system;

14 storing of the foreign file attributes by the local data processing system;

15 determining a subset of the foreign file attributes which are equivalent to a corresponding  
16 subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter  
17 known as conventional file attributes;

18 returning the conventional file attributes to the client;

19 storing a remaining subset of the foreign file attributes which are not equivalent to a  
20 corresponding subset of file attributes of the native file system, the remaining subset of the foreign  
21 file attributes hereinafter known as extended file attributes;

22 accessing of the foreign file attributes stored in the local data processing system by the  
A4 23 local data processing system client to process the foreign file; and  
24 processing by the local data processing system client the foreign file using the stored  
25 foreign file attributes.

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1 8. (Deleted)

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1 9. The article of manufacture of claim 8 wherein the method steps further comprise the steps  
2 of:  
3 accessing of the foreign file by the client via a protocol of the native file system, the  
4 accessing being performed in a similar manner to accessing a native file system file; and  
5 accessing of the foreign file by the client by use of the extended file attributes, the  
6 accessing being performed via a protocol different from the native file system protocol.

A5  
1 10. The article of manufacture of claim 8 wherein the storing step further comprises:  
2 starting an expiration timer corresponding to the extended file attributes; and  
3 removing the extended file attributes from the local data processing system storage after  
4 the expiration of the expiration timer.

1 11. The article of manufacture of claim 8 wherein the sending of the foreign file attributes is  
2 performed by a web server located on the remote system, the web server being capable of sending  
3 and receiving messages via a network.

AS  
1 12. The article of manufacture of claim 8 wherein the method steps further comprise the steps  
2 of:  
3 storing the extended file attributes in a shared memory portion of the local data processing  
4 system storage which is accessible by the client and other local data processing system processes;  
5 associating a unique handle with the extended file attributes; and  
6 providing the unique handle to a local data processing system process to enable the local  
7 data processing system process to access the extended file attributes.

1 13. (Amended) A distributed computer system for accessing a foreign file system from a local  
2 data processing system with a native file system, said foreign file system being located on a  
3 remote data processing system, said foreign file system having a set of foreign file attributes  
4 corresponding to each of a plurality of files in the foreign file system, and said native file system  
5 having a set of native file attributes corresponding to each of a plurality of files in the native file  
6 system, said distributed computer system comprising:

7 a requestor for generating a request from a client on the local data processing system to  
8 the remote data processing system to open a foreign file in the foreign file system;

9 a foreign file which can be opened by the foreign file system;

10 a sender for sending the file attributes of the foreign file, hereinafter foreign file attributes,  
11 to the local data processing system;

12 storage for storing of the foreign file attributes by the local data processing system;

13 a comparator for determining a subset of the foreign file attributes which are equivalent to  
14 a corresponding subset of file attributes of the native file system, the subset of the foreign file  
15 attributes hereinafter known as conventional file attributes;

16 a data transfer for returning the conventional file attributes to the client; and

17 storage for storing a remaining subset of the foreign file attributes which are not  
18 equivalent to a corresponding subset of file attributes of the native file system, the remaining  
19 subset of the foreign file attributes hereinafter known as extended file attributes;

20 a file access for accessing the foreign file attributes stored in the local data processing  
21 system by the local data processing system client to process the foreign file; and

A<sup>52</sup>  
23 a processor for processing by the local data processing system client the foreign file using  
the stored foreign file attributes.

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1 14. (Deleted)

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1 15. The distributed computer system of claim 14 further comprising:  
2 a file access for accessing by the client the foreign file via a protocol of the native file  
3 system, the accessing being performed in a similar manner to accessing a native file system file;  
4 and  
5 a file access for accessing by the client the foreign file by use of the extended file  
6 attributes, the accessing being performed via a protocol different from the native file system  
7 protocol.

A<sup>6</sup>  
1 16. The distributed computer system of claim 14 wherein the storage further comprises:  
2 an expiration timer corresponding to the extended file attributes; and  
3 storage access for removing the extended file attributes from the local data processing  
4 system storage after the expiration of the expiration timer.



1 17. The distributed computer system of claim 14 wherein the sender of the foreign file  
2 attributes is a web server located on the remote system, the web server being capable of sending  
3 and receiving messages via a network.

18. The distributed computer system of claim 14 further comprising:  
a shared memory portion of the local data processing system storage which is accessible  
by the client and other local data processing system processes for storing the extended file  
attributes;  
a unique handle associated with the extended file attributes; and  
a local data processing system process which uses the unique handle to enable the local  
data processing system process to access the extended file attributes.